ralgic pain in superficial nerves. Concerning the faradic current, its main uses are to tetanize muscle and cause sedation of pain. The tetanizing current, as now employed to treat paralyzed muscles, is injurious since it enfeebles the muscle and causes atrophic structural changes. To strengthen a paralyzed muscle a slow rhythm of the faradic—about thirty waves to the second—should be used. In some spastic conditions of muscles (due to paralysis of an opposing group) the strong tetanizing current may be used with advantage to overstimulate and thus fatigue the muscle. The franclinic current or statical electricity is an adjunct of great efficacy. It evokes the usual nerve and muscle reactions, affords a most convenient means of stimulating the continuous peripheral nerves, producing counter-irritating, reflex, and other afferent effects. It has a local perturbatory action (spark), and it causes profound alterations in the metabolism of the individual, increasing the natural waste products, and diminishing the toxic or by-products. For this reason it is especially indicated, in real or general malnutrition. FREEMAN.

CLINICAL.

Diffuse Sclerosis of the Brain and Spinal Cord.—Burk (*Inaugaral Dissertation*, Tubingen, 1895).

Male, good heritage, denied syphilis, intemperate. Disease began in twenty-fifth year, gradually, tremor of right hand ; in the beginning intermittent, occurred especially when writing. Nine months later it affected the right elbow joint and gradually became more severe. Two years after beginning of illness the patient felt weakness of left leg, dragged foot when walking. Weakness increased, lessened mobility ; no pain or perverse sensations. In his thirty-first year, feeling of weakness in right leg, movements slow, never so severely involved as left leg. A year later the head began to totter and shake, tremor in right arm gradually increased, also the left arm. At first the shaking of head was intermittent, soon increased and became continuous. All disappeared during sleep. In his thirty-eighth year, examination showed in addition to what has been given that there was disturbance of speech, syllables jerky, between individual syllables a toning inspiration was made. For the next eight years the patient was so much better that he could go without a stick. For some months, at the end of that time the tremor and weakness was very much worse and he could walk only on crutches. The speech disturbance more severe, and he also noticed that he saw objects laterally to the field of vision double. Later the disturbance of vision vanished.

In his forty-eighth year, aside from the unarticulated speech, immobility of tongue, the continuous tremor movements of the head which ceased only during sleep. The strength of the arms, especially the left, was decreased, likewise, same of lower extremities. Disturbance of co ordination in standing and walking; the patient shook so that he could not be trusted alone.

This condition continued about the same up to his sixty-third year. He then complained of some difficulty in swallowing.

In his seventieth year, a careful examination showed sensibility intact ; also, intelligence and special senses. Speech more marked disturbance, all symptoms little more severe, symptoms worse on left side ; knee-jerk present ; no ankle clonus. In his last years, often complained of a bad taste ; sense of taste normal. Toward the end there were loss of reflexes, difficulty in swallowing, incontinence urine and feces. Death in seventy-sixth year, symptoms of pneumonia and pulmonary œdema, and weakness of heart after influenza.

Post-mortem showed diffuse sclerosis of brain and spinal cord. Old area of softening in the right angular gyrus. Aetero sclerosis. The spinal cord somewhat small and flattened, great resistance to the knife on cutting through it. The brain was small, weighed only 1,100 gms. with the membranes. The sulci gaping and the surface of the brain looking granular on account of small sinkings in.

The microscopical examination showed: Brain uncommonly hard, almost leather-like consistence. Gyri small, white and gray substance sharply differentiated, numerous corpora amylacea. No sclerotic areas or foci to be found, and it could not be said with certainty that there was an increase of the neuroglia or connective tissue Nerve fibres well preserved; white substance especially showed no deviation from normal; ganglion cells normal; ventricles distended; pia thickened and injected.

In the cerebellum the inner cortical layer in an individual focus looked pathological. The spinal cord, a thin, flattened band, leather-like consistency, hard to cut, showed a thickening of the pia and of the septa which radiate in from it; normal preservation of the nerve fibres, and ganglion cells; white and gray substance very much diminished in size, gray more No actual increase of the neuroglia; increase of corpora amylacea; hydromelia of the central canal in the cervical enlargement and in the environs increase of the neuroglia. J. C.

Abortive Acromegaly with Macroglossia.—Chauffard (*Med. Week*, July, 1895). A patient, thirty-two years of age, who has long been in the habit of drinking and smoking in excess, and was formerly affected with lead poisoning. In addition, he suffers from emotional hysteria and irascibility, with left hemianæsthesia. The writer was struck by the large size of the tongue, which led him to examine him carefully for acromegaly, with the result of detecting: (1) marked prognathism; (2) lengthening of the face; (3) cervico-dorsal kyphosis, with compensatory dorso-lumbar lordosis; (4) hypertrophy of the penis; (5) increase in size of the occiput.

Examination of the extremities revealved no pathological modification, the hands being absolutely normal, as well as the feet.

He suffered, however, from continuous headache and ocular disturbances, which had entailed almost complete blindness of the right eye.

These symptoms justify the diagnosis of abortive acromegaly without hypertrophy of the extremities. That there is also hypertrophy of the hypophysis is shown by the headache, and particularly by the visual disturbances. It is known, indeed, that the latter are of very frequent occurrence in acromegaly, a fact which is explained by the compression exerted on the optic chiasma and nerves by the hypertrophied pituitary gland. The compression is evidenced in this case by congestion of the right optic disc, swelling of the veins, stenosis of the artery, and atrophy of the retinal pigment. The patient has, consequently, arrived at what Tamburrini describes as the hypophysal period of acromegaly.

The relationship between acromegaly and giantism is of interest. Already in 1892, Massalongo looked upon acromegaly as a variety of the latter. Tamburrini compared cases of acromegaly with others of ordinary giantism, associated with hypertrophy of the pituitary gland. Lastly, Brissaud and Meige have recently published a monograph on this subject, in which they urge that acromegaly is giantism in an adult, while giantism is acromegaly in an adolescent.

This patient is far from being a giant, as he is only 1.625 metre in height, and weighs but 56.2 kilogrammes. Were it not for the slight prognathism, which he presents, he would be a well-proportioned man. The tongue, however, is of truly gigantic proportions; but macroglossia appears to be a much more frequent and more marked feature in acromegaly than in giantism. Identifying acromegaly with giantism appears to me, therefore, to be going too far. The writer is rather inclined to look upon these two conditions as closely related and frequently associated, but entirely autonomous. J. C.